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PRELIMINARY ASSESSMENT EXECUTIVE SUMMARY



TO:

Linda Martin, U.S. EPA

FROM:

James Christensen, FIT

DATE:

June 28, 1991

SUBJECT:

Plymouth Center Site, Northville Township, Michigan

MID985586833/F05-9102-029/FMI1233PAA

The Plymouth Center site is an 800-adre site located northwest of the intersection of 5-mile and Sheldon Roads in Northville Township, Wayne County, Michigan (SW1/4SW1/4 sec. 15, TIS, R.8E.). The site was the former location of the Plymouth Center for Human Development, which housed mentally and physically handicapped children and young adults. Nine buildings affiliated with the site are now inactive and owned by Wayne County. The only active building is occupied by Wayne County Office of Nutritional Services.

On August 24, 1990, a deputy from the Wayne County Sheriff's Department noticed a broken padlock on a door of a vacant boiler building. The boiler located in this building previously provided power for the entire complex of buildings. Vandals may have broken the lock, as the site has been the scene of frequent vandalism and looting. Upon investigating, the deputy detected strong odors and fumes emitting from the building, and experienced irritation to his eyes, nose, and skin. The deputy contacted Northville Township Fire Department (NTFD). Firemen responded and experienced symptoms similar to the deputy's. NTFD requested assistance from the Western Wayne County Hazmat (WWCH) Team. WWCH personnel entered the building and observed a bank of approximately 60 batteries in the basement of the building, several of which had leaked onto the concrete floor. WWCH also noted ten 55-gallon drums and approximately 300 smaller containers (between 4 ounces and 1 gallon)

containing paints, lacquers, and thinners. The drums and containers were not leaking and were adequately contained by the building.

Six of the 55-gallon drums contained a chlorinated hydrocarbon which could produce toxic fumes if it had reacted with the sulfuric acid from the leaking batteries. Two of the drums contained substances that could have been incompatible with any potentially on-site oxidizing agents. Paints, lacquers and thinners presented potential vapor or explosive hazards.

On August 29, 1990, MDNR requested that U.S. EPA respond to the incident and provide air monitoring assistance. EPA in turn requested that U.S. EPA Technical Assistant Team (TAT) respond.

TAT performed an investigation at the Plymouth Center site on August 29, 1990. Cleanup activities were conducted by K & D Industrial Services. This cleanup consisted of dismantling and removing the batteries and spreading soda ash over the spilled sulfuric acid that had leaked from the batteries; the sampling, over-packing, staging and removal of the 55-gallon drums, and compositing the smaller containers into a 55-gallon drum that contained industrial absorbent. This drum was also over-packed, staged, and removed. The smaller containers were cleaned and properly disposed of.

FIT believes that release of substances to groundwater, surface water, or soil exposure pathways is unlikely. The sources were initially contained in drums and enclosed in the boiler building which had a concrete floor.

The air pathway was considered by FIT, because fumes and odors were reported and people on-site reported the effects of these fumes and odors. Also, the active Wayne County Office of Nutritional Services which employs 50 people was connected to the boiler building by a series of underground heating tunnels. Additionally, vandals on the property could have been exposed via the air pathway. However, with all substances removed this threat no longer exists.

Because the drums, batteries, and other containers were contained within the building and were removed from the site in 1990, FIT recommends that the site receive a NFRAP status.

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